EDITORIALS

Some Conceptual and Practical Problems Facing Medicine

A GENERATION or so ago the trusted and beloved family doctor became largely superseded by the present-day scientific medical specialist. The faith that had been placed in the family doctor was transferred to modern medical science with great patient and public expectations for it. When this highly touted and very much oversold medical science did not fulfill these expectations, this faith was shaken, and there has been considerable disillusionment which has been largely focused on the medical profession. The ramifications of this disillusionment have been many and far-reaching, and among other things have given rise to a number of fundamental conceptual and practical problems which now face medicine. Many of these seem to require some sort of practical blending of conceptual opposites.

• For example, it is no longer accepted by the public that physicians and the medical profession will protect the interest of patients and the public without more safeguards. Professional peer review alone does not satisfy the public interest or concern. Yet persons outside the profession are often incapable, or at least at great disadvantage, when they attempt to pass judgment on medical matters for which they have no professional training or experience. Professional responsibility and public accountability are in a sense conceptual opposites which are now giving rise to practical problems.

• The public, through government, has encouraged both the production of more physicians and the proliferation of so-called second level practitioners both in numbers and scope of practice. It seems likely that there will soon be too many practitioners in the health field; that is, more than can be supported. If there is to be a surfeit of health care practitioners, the capabilities, limitations and turf of each will need to be defined, and the essential and distinctive roles of doctors of medicine identified and recognized. There is much to be worked out here at both conceptual and practical levels.

• Medical science is the mast to which we have nailed our professional flag, yet if we were asked never to use any procedures or treatments that had not been scientifically proven or verified, we would be in a sad situation. Medicine is an art as well as a science, and patients have benefitted from the art far longer than they have from the science. There are many conceptual and practical problems to be dealt with as the cost effectiveness of what physicians do becomes increasingly questioned by a nonprofessional and cost conscious public.

• Caring was the forte of old-time family doctors. They could do little curing. Curing is the forte of modern scientific physician practitioners. As specialized curing has moved into the ascendancy in medical education and patient care it has often been at the expense of attending the whole patient—and of caring. The present tendency to polarize these functions into scientific medicine on the one hand and holistic health on the other is producing unwanted schisms in patient care. There are conceptual and practical problems to be resolved here, but the tent of medicine must always have room for genuine curing and genuine caring for the whole person by whatever means these can be accomplished.

• During the last few years there have been significant attempts by government to force medical care into the mold of a trade in the hope that, by reducing restraints on trade, costs would be decreased. An opposite force, a desire to assure quality, is also at work. This has been a specific goal of the medical profession in the United States since 1910, and the profession has developed systems of accreditation, certification and fee studies to accomplish it. Here again are conceptual opposites, giving rise to very practical problems.

These are only some examples of the kind of fundamental problems that confront the medical profession today. One senses that we have no

really effective means in organized medicine to study them in any sort of depth, or to develop realistic policies that will recognize the need to find an accommodation between such conceptual opposites which impinge upon physicians and patient care. It is unlikely that problems such as these can be solved by medicine alone, but neither can they be solved without medicine's leadership and the support of public opinion. It is not too early for the medical profession, through its leadership, to begin to think through some of these conceptual issues and then, perhaps in concert with others, to develop policies to deal more effectively with some of the practical problems that are even now at hand.

—MSMW

Mount Olympus Revisited

TO THE ANCIENT GREEKS, Mount Olympus was the abode of the gods, and any mortal venturing there did so at his peril. Although our appreciation of the hazards of mountainous regions has changed over the centuries, respect and caution are still advisable. Not only are the terrain and weather often hostile, but there are the added hazards posed by the inescapable hypoxia resulting from the lower atmospheric pressure at high altitude. Elsewhere in this issue, Hultgren has dealt with these hazards in his excellent review of high altitude medical problems. Very properly, the reader is confronted with the reality that life-threatening altitude sickness can develop at elevations no higher than 9,000 feet, and that millions of Americans enter this danger zone each year when they visit our Western mountains. Altitude sickness is not a medical curiosity encountered only by foolhardy climbers at extreme altitudes in remote corners of the world. It is a potential threat to average tourists on vacation in the Rockies or the Sierras. Fortunately, the incidence of serious problems is low, but physicians must be aware of the problems that may arise.

A persons driving into the mountains is exposed to a progressively lower atmospheric pressure. Although the concentration of oxygen remains constant at 21 percent, the partial pressure of oxygen falls as the total atmospheric pressure decreases. It is this atmospheric hypoxia that disturbs the mechanisms of oxygen transport in the body, and initiates the normal processes of adaptation. During this transition from normoxia to hypoxia, acute mountain sickness (AMS) appears. No underlying disease process is involved. However, the exact pathogenesis of AMS is poorly understood, and the basis for individual variability is unknown. Hence, the physician's approach must be that AMS may develop in anyone, and the likelihood is enhanced the greater and more rapid the change in altitude—that is, the greater and more abrupt the hypoxic stimulus. As Hultgren emphasizes, the most effective way to avoid AMS, therefore, is to make the ascent gradual.

Americans always seem to be in a hurry, and many will simply not heed the advice of gradual ascent. They will fly to Denver (5,300 feet), rent a car and in a matter of hours be at a mountain resort area such as Keystone (located at 9,300 feet elevation). Predictably, half of these people will suffer some degree of AMS.[1] While more gradual ascent will reduce the incidence of AMS, in some persons symptoms will still develop. Realistically, then, a certain amount of AMS is inevitable. Fortunately, most cases of AMS are self-limiting. However, it is those persons with AMS whose conditions progressively deteriorate who are at serious risk. We must educate the public in recognizing this latter situation.

Hultgren presents definitive descriptions of the various forms of AMS, including high altitude pulmonary edema (HAPE) and cerebral edema. These are based on his long-standing interest, his research and his extensive firsthand experience treating patients with AMS both in the Sierras and in the Andes. There is uniform agreement that the most reliable form of treatment of AMS is prompt descent. Furthermore, descent should be initiated at the first indication that the person's condition is deteriorating rather than showing the usual spontaneous improvement. To wait and see if the person's condition will get worse can convert an ambulatory patient to one who must be carried, and such delays have proved fatal. Since the initiating cause of AMS is atmospheric hypoxia, the ultimate goal of therapy is relief of hypoxia. Hence, supplemental oxygen is useful. However, Hackett, Rennie and Levine have reported that in treating patients with AMS at 14,000 feet, descent to 11,000 feet produced dramatic improvement whereas supplemental oxygen at the higher altitude did not.[2]

Paradoxically, high altitude natives are not immune to AMS, as Hultgren points out. In fact, such natives may have an exaggerated suscepti-